AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A computerized interface for data presentation, comprising:

a property analyzer [[to]] that determines an item distribution for at least two cluster properties and forms a plurality of first-level clusters based in part on a first property of a plurality of properties, and automatically selects at least one other property and determines at least one other item distribution based in part on the at least one other property of the plurality of properties; and

an organizer that automatically forms a plurality of new clusters based in part on the item distribution the at least one other property, and presents the plurality of new clusters.

2.   (Currently amended) The system interface of claim 1, the plurality of cluster properties are associated with one or more data a plurality of items, the plurality of [[data]] items are stored in at least one of a local and a remote storage location.

3.   (Currently amended) The system interface of claim 2, the plurality of [[data]] items include at least one of a document[[s]], a file[[s]], a folder[[s]], an image[[s]], an audio file[[s]], a video file[[s]], a code, a message[[s]], [[and]] or a computer representation of external objects including people or locations.

4.   (Currently amended) The system interface of claim [[2]] 1, the plurality of cluster properties comprises are associated with at least one of an item's a type of an item, a date or time the item was created, people associated with the [[data]] item, a location of the item, a category of the item, [[and]] or a system, application, administrator or user-defined property of the item.

5.   (Currently amended) The ~~system~~ <u>interface</u> of claim 1, ~~the property analyzer determines a cluster by an~~ <u>the first property is a</u> type <u>of an item</u> ~~and then determines a subsequent cluster based upon another property~~.

6.   (Currently amended) The ~~system~~ <u>interface</u> of claim 1, the property analyzer assigns a clusterization score to ~~various item~~ <u>each of the plurality of</u> properties and selects [[a]] <u>the at least one other</u> property [[with]] <u>based on</u> a highest <u>clusterization</u> score.

7.   (Currently amended) The ~~system~~ <u>interface</u> of claim 6, the clusterization score is calculated <u>as a function of the number of items in each cluster and the number of clusters in the plurality of clusters</u> ~~by multiplying in the following equation: $score = n\_items_{cluster1} * n\_items_{cluster2} * \ldots$~~.

8.   (Currently amended) The ~~system~~ <u>interface</u> of claim 6, the clusterization score is <u>calculated as a function of a total number of items and the number of items in each cluster of the plurality of clusters</u> ~~based on binomial distribution as follows: $score = (N\_total)! / ((n\_items_{cluster1})! * (n\_items_{cluster2})! * \ldots)$~~.

9.   (Currently amended) The ~~system~~ <u>interface</u> of claim 1, further comprising a user interface to at least one of display cluster results, receive query selections, and receive property information, display information relating to a<u>n</u> [[data]] item in a cluster.

10.   (Original) A computer readable medium having computer readable instructions stored thereon for implementing the property analyzer and the cluster organizer of claim 1.

11.   (Withdrawn) A system for automatically clustering query results, comprising:

means for retrieving properties of a plurality of items;

means for determining a score for the plurality of items based upon the properties; and

means for automatically clustering data associated with the items based upon the determined score.

12.   (Withdrawn) A method for automatic query clustering, comprising:

associating one or more properties with a plurality of data items;

determining a distribution for the data items based upon the properties; and

automatically clustering the data items based upon the determined distribution.

13.   (Withdrawn) The method of claim 12, the distribution is determined from at least one of the following equations:

$$score = n\_items_{cluster1} * n\_items_{cluster2} * \ldots$$
$$score = (N\_total)! / ((n\_items_{cluster1})! * (n\_items_{cluster2})! * \ldots)$$

14.   (Withdrawn) The method of claim 12, further comprising processing N items and M properties.

15.   (Withdrawn) The method of claim 14, further comprising at least one of initializing M hash tables, iterating through N items and, for each item, iterating through M properties.

16.   (Withdrawn) The method of claim 15, further comprising calculating a hash value for each property.

17.   (Withdrawn) The method of claim 16, further comprising calculating a clusterization score for each property using data from an associated hash table.

18.   (Original) The method of claim 12, further comprising automatically organizing clusters based upon a predetermined threshold.

19.   The method of claim 18, further comprising suggesting alternative cluster grouping.

20.   (Original) The method of claim 18, further comprising organizing clusters based upon user-defined properties.

21.   (Original) A graphical user interface, comprising:
        one or more data items and associated properties stored in a database;
        one or more display objects created for the data items;
        an input component for selecting the data items and the associated properties; and
        a display component to present the display objects based in part on an automated analysis of the properties.

22.   (Original) The interface of claim 21, further comprising controls for interacting with the properties.

23.   (Original) The interface of claim 22, the properties are employed for nested querying of results.

24.   (Original) The interface of claim 22, the properties include at least one of a type, a location, a category, a person, a date, a time, and a user-defined parameter.

25.   (Original) The interface of claim 22, further comprising a component to learn implicitly from user actions.

26.   (Original) The interface of claim 22, further comprising at least one semi-collapsed list or group.

27.   (Original) The interface of claim 26, further comprising controls for expanding the list or group.

28.   (Original) The interface of claim 27, where at least one large property cluster is presented in a squeezed view utilizing a semi-collapsed list.

29.   (New) A computerized interface for optimizing retrieval and display of information, comprising:

        a property analyzer that determines an item distribution and forms a plurality of clusters based on a first property of a plurality of properties, and automatically selects at least one other property of the plurality of properties and determines a distribution of a plurality of items based in part on the at least one other property; and

            an organizer that automatically forms a plurality of optimized clusters and distributes the plurality of items in the plurality of optimized clusters based in part on the at least one other property, and presents the plurality of optimized clusters.

30.   (New) The interface of claim 29, the plurality of items are stored in at least one of a local and a remote storage location.

31.   (New) The interface of claim 30, the plurality of items comprise at least two of a document, a file, a folder, an image, an audio file, a video file, a code, a message, or a computer representation of external objects including people or locations.

32.   (New) The interface of claim 29, the plurality of properties comprises a type of the item, a date or time the item was created, people associated with the item, a location of the item, a category of the item, or a system, application, administrator or user-defined property of the item.

33.   (New) The interface of claim 32, the plurality of properties further comprises metadata.

34.   (New) The interface of claim 29, the property analyzer calculates a clusterization score for each of the plurality of properties and selects the at least one other property based on a highest clusterization score, the clusterization score is calculated as a function of the number of clusters and the number of items in each of the plurality of clusters.

35.   (New) The interface of claim 29, at least one of the plurality of optimized clusters or the plurality of items are presented in a semi-collapsed form based on a significance criteria.